

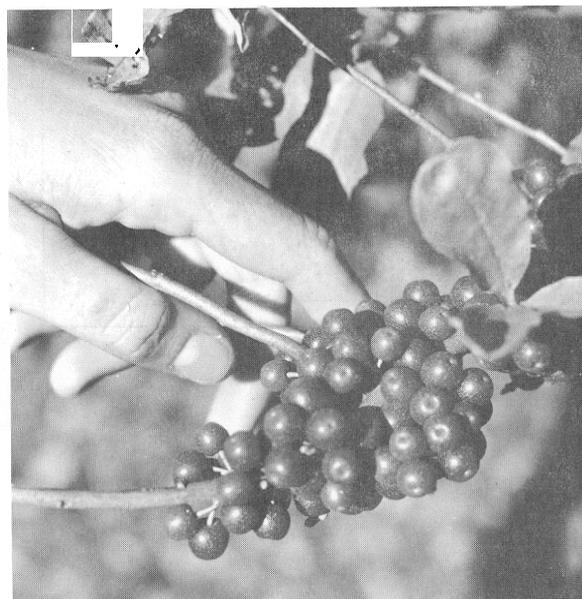
PLANTS FOR CONSERVATION IN THE NORTHEAST
USDA - SOIL CONSERVATION SERVICE

CONSERVATION PLANT SHEET NE-1

AUTUMN-OLIVE
(*Elaeagnus umbellata*, Thunb.)

Uses: Autumn - olive produces fruits eaten by 4 species of upland game birds, 2 migratory game birds, 20 non-game birds, and 4 mammals. It is browsed by deer and barked by cottontail rabbits and meadow mice. It is a good nesting and protective cover plant. Autumn-olive is useful in stabilizing stripmine spoil; screening unsightly areas; hedging fields, ponds, and other tracts; bordering woods; and for windbreaks. It is an attractive ornamental, having fragrant bloom, and edible but astringent red fruits.

Description: Autumn-olive is a spreading, upright nitrogen - fixing shrub. It grows to about 15 feet. The brown or yellowish-brown bark is smooth except on very old stems, where it is somewhat scaly. Twigs are spurred. There is a deep tap - root. The smallish, alternate leaves vary in shape from narrow to moderately wide, with wavy edges. Leaf color is pale olive - green with a silvery cast; the latter especially typical of the underside. Flowers are small, trumpet - shaped, pale - yellow; and abundantly scattered in clusters along the twigs. The fruits contain one soft, ridged pit. They vary from dull to bright red, minutely speckled. Annual fruit production starts at about 5 years and ordinarily is very heavy.



Varieties: Cardinal is the only named variety. Others are being developed.

Adaptation: Autumn-olive is widely adapted to deep, dry to moist soils, ranging from acid to alkaline. It grows well on sands, loams, and clay loams, but not on very dry or shallow sites. It is competitive with grasses and weeds, although somewhat slowed in growth. Autumn-olive is moderately shade tolerant. Winter injury may occur at temperatures of -30°F. , but recovery usually occurs.

Establishment: Seedlings 1 to 2 years old usually are planted during dormancy in spring or fall. Preparation of planting sites for borders, screens, hedges and other strips by plowing, harrowing and allowing soil to compact pays off in establishment. Scalping or other means of removal of com-

peting plants is advisable for blocks and other plantings. Roots of seedlings should be kept moist until planted. Plants are set in furrows or holes deep enough to take the root to its crown without bending. Long roots and tops can be pruned to 6 inches, respectively. A scant handful of 5-10-5 or 10-10-10 fertilizer per plant, when well-mixed with the soil, helps start growth on infertile sites. Mulch is advisable on dry sites.

Management: For maximum fruit production, plants should be spaced at least 8 feet apart. Closer spacing to 4 feet may be used for screening and similar strips. When multiple rows are used, 15 to 20 feet between rows usually is advisable. When plantations are slow in establishment, weeding, fertilizing, and mulching are recommended remedies. New plantings may need protection from deer and rabbits. Autumn-olive may be pruned to satisfactory form.

